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Baker Donelson Bearman, Caldwell & Berkowitz, PC 920 Massachusetts Ave, NW Suite 900 Washington, DC 20001				
EXAMINER				
O'HERN, BRENT T				
ART UNIT		PAPER NUMBER		
1783				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/563,256

Applicant(s)

WILFER ET AL.

Examiner

BRENT T. O'HERN

Art Unit

1783

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6,8,9 and 11-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,8,9 and 11-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-945)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims

1. Claims 1-2, 4-6, 8-9 and 11-23 are pending.

WITHDRAWN OBJECTIONS

2. All objections of record in the Office action mailed 7/7/2010 have been withdrawn due to Applicant's amendments in the Paper filed 12/7/2010.

WITHDRAWN REJECTIONS

3. All rejections of record in the Office action mailed 7/7/2010 have been withdrawn due to Applicant's amendments in the Paper filed 12/7/2010.

NEW REJECTIONS

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

5. Claims 1-2, 4-6, 8-9, 11-15, 17-20 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hisazumi et al. (US 4,764,406) in view of Anderson et al. (US 6,231,970), Delius et al. (US 2002/0065364) and Krallmann et al. (US 2003/0059502).

Regarding claims 1-2, 8, 17-18 and 23, Hisazumi ('406) teaches a smoke and water vapor permeable tubular food casing and a method of making (*See Abstract and col. 3, ll. 16-30 and col. 4, ll. 20-21, tubular.*) made of polyamides and copolyamides (*See Abstract, col. 3, ll. 16-30, col. 8, ll. 12-24.*) which are impregnated with smoke on the food-facing side (*See Abstract, col. 3, ll. 16-30 and col. 8, ll. 12-45 wherein the*

sausage is smoked with the smoke residue that impregnates the sausage casing and sausage which is interpreted as including the casing/sausage interface, thus, having a structure that is equivalent to a liquid acidic smoke that is generated from smoke otherwise the smoke would dissipate without the smoke having a smoked flavor. If Hisazumi's ('406) smoke structure is not interpreted as having a structure that is the same as claimed then it would have been obvious to look to Krallmann ('502), as discussed below, that teaches a liquid acidic smoke that is applied to the food facing side of the casing.), and at least one thermoplastic other polymer or copolymer, wherein the thermoplastic other polymer or copolymer is hydrophilic, water-soluble and swells under the action of water or water vapor (See Abstract, col. 3, ll. 16-30, col. 8, ll. 12-24 wherein the hydrophilic copolymer is ethylene-vinyl alcohol. See also p. 7, ll. 12-13 of Applicant's Specification where Applicant discloses ethylene-vinyl alcohol as being hydrophilic. See p. 8, para. 4 of Applicant's Paper filed 12/7/2010 where Applicant admits that Hisazumi's ('406) copolymers are hydrophilic. Thus, the ethylene-vinyl alcohol as taught by Hisazumi ('406) is interpreted as being hydrophilic. Since the material is the same hydrophilic polymer as Applicant discloses in the Specification as swelling then Hisazumi's ('406) material is also interpreted as able to swell.), however, fails to expressly disclose the smoke being acidic, the casing comprises an organic or inorganic filler, contains at least one additive from a dye or a color pigment, is shirred and wherein the thermoplastic other polymer or copolymer has a solubility of at least 20 g/L in water at 80 °C, wherein the food is a sausage emulsion or raw sausage emulsion.

For the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, “**consisting essentially of**” will be construed as equivalent to “comprising”. See, e.g., PPG, 156 F.3d at 1355, 48 USPQ2d at 1355 (“PPG could have defined the scope of the phrase consisting essentially of” for purposes of its patent by making clear in its specification what it regarded as constituting a material change in the basic and novel characteristics of the invention.”). MPEP 2111.03 Also, if an applicant contends that additional steps or materials in the prior art are excluded by the recitation of “consisting essentially of,” applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant’s invention. In re De Lajarte, 337 F.2d 870, 143 USPQ 256 (CCPA 1964).

Regarding the claimed solubility Applicant discloses in the Specification that the ethylene-vinyl alcohol used in its casing is hydrophilic (*See p. 7, ll. 12-13 of Applicant’s Specification.*). See p. 8, para. 4 of Applicant’s Paper filed 12/7/2010 where Applicant admits that Hisazumi’s (‘406) copolymers are hydrophilic. Hisazumi (‘406) also teaches the hydrophilic copolymer being ethylene-vinyl alcohol with a similar type or use as Applicant (*See Abstract, col. 3, ll. 16-30 and col. 8, ll. 12-24.*). Thus, since Hisazumi’s (‘406) hydrophilic copolymer is either the same or substantially similar to Applicant’s copolymer it then would have been obvious that Hisazumi’s (‘406) material has a solubility that is consistent with that claimed.

Anderson ('970) teaches a tubular food casing having inorganic fillers such as titanium dioxide and glass fibers or organic fillers such as carbohydrates, polysaccharides, and/or a derivative thereof (*See col. 18, l. 65 to col. 19, l. 33, col. 25, ll. 14-18, col. 26, ll. 62-66, col. 27, ll. 10-16, col. 28, l. 34+, col. 31, ll. 33-48 and col. 33, l. 32+.*) with the above amount of filler (*See col. 18, ll. 57-64 and col. 20, ll. 46-55.*) for the purpose of providing a casing with swellable materials that are cost effective and easy to process (*See col. 19, ll. 1-33.*). Inexpensive fillers are known to reduce the per unit costs of casings.

Therefore, it would have been obvious to a person having ordinary skill in the art to incorporate the materials as taught by Anderson ('970) in Hisazumi ('406) in order to provide a casing that is swellable, cost effective and easy to process.

Delius ('364) teaches a sausage casing (*See Abstract.*) containing conventional additive pigments (*See para. 36.*) for the purpose of providing a moist food/sausage having the desired color (*See para. 11.*).

Therefore it would have been obvious to provide Hisazumi's ('406) casing with a pigment in order to provide a sausage casing with the desired color.

Krallmann ('502) teaches applying a liquid acidic smoke to the inner layer of a biaxially oriented tubular film before shirring (*See Abstract and paras. 26-28.*) and encasing a smoked sausage emulsion (*See para. 34.*) for the purpose of providing an encased smoked sausage with an increased depth of smoker flavor (*See paras. 2 and 27.*).

Therefore, it would have been obvious to provide a liquid smoke to the inner surface of Hisazumi's ('406) casing and to produce an encased sausage emulsion as taught by Krallmann ('502) in Hisazumi ('406) with the method discussed above in order to provide an encased tubular sausage having an increased depth of smoke flavor.

Regarding claim 4, Hisazumi ('406) teaches the casing being made from polycaprolactam (nylon 6) (*See col. 6, ll. 42-45 and col. 8, ll. 12-25.*).

Regarding claim 5, Hisazumi ('406), Anderson ('970) and Krallmann ('502) teach the casing discussed above, however, fail to expressly disclose wherein the polyamide or copolyamide forms therein a coherent phase.

However, Delius ('364) teaches a sausage casing (*See Abstract.*) having a polymer blend with a coherent phase made from an aliphatic copolyamide (*See Abstract and paras. 18-24.*) for the purpose of providing a moist food/sausage (*See para. 11.*).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time Applicant's invention was made that Hisazumi's ('406) casing is coherent since it is similar to the structure as claimed or it would have been obvious to provide a polymer blend with a coherent phase made from an aliphatic copolyamide as taught by Delius ('364) in Hisazumi ('406) in order to provide a moist food.

Regarding claim 6, Hisazumi ('406) teaches wherein component a) is present in a fraction of 40 to 90 % by weight based on the total weight of the mixture (*See col. 3, ll. 16-30.*).

Regarding claim 9, Hisazumi ('406) teaches wherein the component b) is present in a fraction of 10 to 60 % by weight, based on the total weight of the mixture (*See Abstract, col. 3, ll. 16-30.*).

Regarding claims 11-13 and 22, Hisazumi ('406), Delius ('364) and Krallmann ('502) teach the casing discussed above, however, fail to expressly disclose wherein the thermoplastic mixture additionally contains at least one organic or inorganic filler, wherein the inorganic filler comprises quartz powder, titanium dioxide, talcum, mica and other aluminosilicates, glass staple fibers and other mineral fibers and/or glass microspheres, wherein the organic filler is a polysaccharide, and wherein the polysaccharide is starch, cellulose, exo-polysaccharides, a polysaccharide derivative, crosslinked starch, starch ester, cellulose ester, cellulose ether, or carboxyalkylcellulose ether and is present in a fraction greater than zero but not greater than 40% by weight, based on the total weight of the mixture.

However, Anderson ('970) teaches a food casing having inorganic fillers such as titanium dioxide and glass fibers or organic fillers such as carbohydrates, polysaccharides, and/or a derivative thereof (*See col. 18, l. 65 to col. 19, l. 33, col. 25, ll. 14-18, col. 26, ll. 62-66, col. 27, ll. 10-16, col. 28, l. 34+, col. 31, ll. 33-48 and col. 33, l. 32+.*) with the above amount of filler (*See col. 18, ll. 57-64 and col. 20, ll. 46-55.*) for the purpose of providing a casing with swellable materials that are cost effective and easy to process (*See col. 19, ll. 1-33.*).

Therefore, it would have been obvious to a person having ordinary skill in the art to incorporate the materials as taught by Anderson ('970) in Hisazumi ('406) in order to provide a casing that is swellable, cost effective and easy to process.

Regarding claim 14, Hisazumi ('406) teaches the casing discussed above and obviously teaches the product having a water vapor permeability (WVP), determined as specified in DIN 53 122, with air impinging the casing on a single side at 23°C and at a relative humidity of 85 %, is at least 30 g/m²d (*See col. 3, ll. 27-30 where Hisazumi ('406) teaches a WVTR of not more than 70 g/m²d at 40°C and at a relative humidity of 90 %, thus, a person having ordinary skill in the art would reasonably infer that the water vapor permeability (WVP) would be at least 30 g/m²d under the above conditions as the structure of the casing would not change to such an extent that the WVP would decrease below the claimed range as the intent of the casing is for it to be effectively permeable to smoke.*).

Regarding claim 15, Hisazumi ('406) teaches wherein the food casing is multilayered (*See Abstract and col. 3, ll. 16-30.*).

Regarding claim 19, Hisazumi ('406), Anderson ('970), Delius ('364) and Krallmann ('502) teach the casing discussed above, and a method of making a water-vapor- and smoke-permeable tubular casing based on polyamide, however, fail to expressly disclose closing the casing and storing the stuffed casing.

However, it would have been obvious to close the above stuffed casing and store the product so as to provide a sanitary product that is isolated from dirt and ready for sale as opposed to having a customer wait for the sausage to be made. Therefore, it

would have been obvious to close and store Hisazumi's ('406) product in order to provide a clean and ready to clean/use product.

Regarding claim 20, Hisazumi ('406) teaches wherein the food casing contains a smoked sausage or cheese (*See col. 7, ll. 25-31.*).

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hisazumi et al. (US 4,764,406) in view of Anderson et al. (US 6,231,970), Delius et al. (US 2002/0065364), Krallmann et al. (US 2003/0059502) and Okudaira (US 6,294,263).

Hisazumi ('406), Anderson ('970), Delius ('364) and Krallmann ('502) teach the casing discussed above, however, fail to expressly disclose the food casing being heat set.

However, Okudaira ('263) teaches a tubular and seamless casing (*See col. 7, ll. 55-60.*), biaxially oriented (*See col. 7, ll. 16-30.*) and a heat-set polyamide-based food casing (*See col. 7, ll. 7-15.*) for the purpose of providing a fatigue resistant casing (*See col. 1, ll. 54-62.*).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time Applicant's invention was made that Hisazumi's ('406) casing has the above properties since the casing is substantially similar or it would have been obvious to process Hisazumi's ('406) casing as taught by Okudaira ('263) in order to provide a casing that is fatigue resistant.

7. Claim 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hisazumi et al. (US 4,764,406) in view of Anderson et al. (US 6,231,970), Delius et al.

(US 2002/0065364), Krallmann et al. (US 2003/0059502) and Hammer et al. (US 5,501,886).

Hisazumi ('406), Anderson ('970), Delius ('364) and Krallmann ('502) teach the casing discussed above, however, fail to expressly disclose the casing being seamless.

However, Hammer ('886) teaches tubular, seamless, shirred sausage (*See col. 5, ll. 10-13 and col. 10, ll. 57-60, seamless and shirred.*) for the purpose of providing a pliable material that can easily be stored and handled (*See col. 12, ll. 5-9.*).

Therefore, it would have been obvious to use casing that are seamless as taught by Hammer ('886) in Hisazumi ('406) in order to provide a material that is pliable and can easily be stored and handled.

ANSWERS TO APPLICANT'S ARGUMENTS

8. In response to Applicant's arguments (*See p. 5, para. 1 of Applicant's Paper filed 12/7/2010.*) regarding the status of the claims and amendments, it is noted that the Examiner acknowledges said arguments and does not have issues with said arguments.
9. In response to Applicant's arguments (*See p. 5, para. 2 of Applicant's Paper filed 12/7/2010.*) regarding the objections, it is noted that the amendments are effective in overcoming said objections.
10. In response to Applicant's arguments (*See pp. 5-6 of Applicant's Paper filed 12/7/2010.*) regarding the 35 USC 112 rejections, it is noted that the amendments are effective in overcoming said rejections.

11. In response to Applicant's arguments (*See p. 7 of Applicant's Paper filed 12/7/2010.*) regarding the objections and 35 USC 102 rejections, it is noted that the amendments are effective in overcoming said rejections.
12. In response to Applicant's arguments (*See pp. 7-11 of Applicant's Paper filed 12/7/2010.*) regarding the 35 USC 103 rejections in light of the amended claims, it is noted that the Examiner has fully considered all of said arguments. Applicant's arguments are substantially directed to the new limitations.
13. In response to Applicant's arguments (*See pp. 8-11 of Applicant's Paper filed 12/7/2010.*) regarding the new solubility and other limitations added to independent claim 1, it is noted that these new limitations are discussed above.
14. In response to Applicant's arguments (*See p. 8, para. 2 of Applicant's Paper filed 12/7/2010.*) regarding the new solubility limitations added to independent claim 1, it is noted that these new limitations are discussed above.
15. In response to Applicant's arguments (*See p. 8, para. 3 of Applicant's Paper filed 12/7/2010.*) that since Hisazumi's sausage is smoked after being filled it does not teach applying smoke before filling with liquid smoke applied to the food facing side of the casing, it is noted that said arguments are not persuasive. Independent claim 1 is directed to a casing and does set forth a time for when smoke is applied to the casing. As discussed above, the smoke that is present in Hisazumi's casing/sausage is not in the form of a gas but rather a material that has impregnated all portions of the casing/sausage which is either provides the same or substantially similar structure as set forth in the claims. The smoke language is broad and generic. Liquid smoke is

generally interpreted as smoke that has been absorbed in water and after the material has been applied the water either evaporates or establishes an equilibrium with the other water already present in the food. Even if Hisazumi's smoke structure is not interpreted as being the same as claimed then it would have been obvious to look to Krallmann which teaches applying a liquid acidic smoke to the inner layer of a biaxially oriented tubular film before shirring (*See Abstract and paras. 26-28.*). Krallmann's smoke provides an encased smoked sausage with an increased depth of smoker flavor (*See paras. 2 and 27.*).

16. In response to Applicant's arguments (*See p. 8, para. 4 of Applicant's Paper filed 12/7/2010.*) that Hisazumi does not teach the new solubility limitations added to independent claim 1, it is noted that these new limitations are discussed above.

17. In response to Applicant's arguments (*See p. 8, para. 4 of Applicant's Paper filed 12/7/2010.*) regarding the hydrophilic nature of Hisazumi, it is noted that Applicant's admission that Hisazumi's ('406) copolymers are hydrophilic. Applicant discloses in the Specification that the ethylene-vinyl alcohol used in its casing is hydrophilic (*See p. 7, ll. 12-13 of Applicant's Specification.*). Hisazumi ('406) also teaches the hydrophilic copolymer being ethylene-vinyl alcohol with a similar type or use as Applicant (*See Abstract, col. 3, ll. 16-30 and col. 8, ll. 12-24.*).

18. In response to Applicant's arguments (*See p. 8, para. 6 of Applicant's Paper filed 12/7/2010.*) that although Andersen's materials are used in food packaging they are not used with smoke or water-vapor permeable food casing, it is noted that said arguments are not persuasive. As discussed above, Anderson teaches a food casing having

inorganic fillers such as titanium dioxide and glass fibers or organic fillers such as carbohydrates, polysaccharides, and/or a derivative thereof with the claimed amount of filler (*See col. 18, ll. 57-64 and col. 20, ll. 46-55.*). Adding low cost fillers are common for reducing food costs.

19. In response to Applicant's arguments (*See p. 8, para. 6 of Applicant's Paper filed 12/7/2010.*) that Andersen does not teach the new limitations added to independent claim 1, it is noted that these new limitations are discussed above.

20. In response to Applicant's arguments (*See p. 9, para. 1 of Applicant's Paper filed 12/7/2010.*) that Delius does not teach the new solubility limitations added to independent claim 1, it is noted that these new limitations are discussed above.

21. In response to Applicant's arguments (*See p. 9, para. 6 of Applicant's Paper filed 12/7/2010.*) that Okudaira does not teach the new solubility limitations added to independent claim 1, it is noted that these new limitations are discussed above.

22. In response to Applicant's arguments (*See p. 10, para. 5 of Applicant's Paper filed 12/7/2010.*) that Hammer does not teach the new solubility limitations added to independent claim 1 and is directed to a different type of casings than claimed, it is noted that these new limitations are discussed above. Hammer is directed to tubular, seamless, shirred casings/sausage (*See col. 5, ll. 10-13 and col. 10, ll. 57-60, seamless and shirred.*) which is what the claims are directed to.

23. In response to Applicant's arguments (*See p. 11, para. 3 of Applicant's Paper filed 12/7/2010.*) that Hammer does not teach the new solubility limitations added to independent claim 1, it is noted that these new limitations are discussed above.

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRENT T. O'HERN whose telephone number is (571)272-6385. The examiner can normally be reached on Monday-Thursday, 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on (571) 272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BRENT T O'HERN/
Examiner, Art Unit 1783
January 1, 2011